

The segment of claim 1, wherein the polymorphic form occupying the polymorphic site is an alternative form listed in Table 1, column 2, or 4-11.

An allele-specific oligonucleotide that
hybridizes to a segment of human mitochondrial nucleic acid or
its complement including a polymorphic site shown in Table 1,
column 1

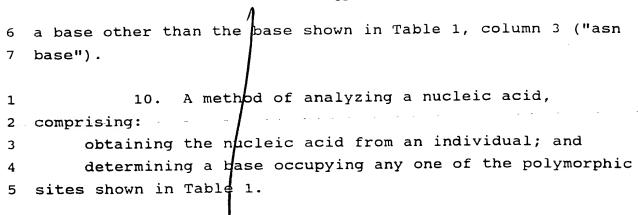
5. The allele-specific oligonucleotide of claim 10 that is probe.

6. The allele-specific oligonucleotide of claim 10, wherein a central position of the probe aligns with the polymorphic site of the fragment.

7. The allele-specific oligonucleotide of claim 10 that is a primer.

The allele-specific oligonucleotide of claim 13, wherein the 3' end of the primer aligns with the 3 polymorphic site of the fragment.

9. An isolated nucleic acid comprising a segment
of the human mitochondrial sequence described by Anderson et
al., Nature 290, 457-465 (1981), or the complement thereof,
including a polymorphic site shown in Table 1, column 1,
wherein the polymorphic site within the segment is occupied by



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